

Emissions Inventory Help Sheet for Incinerators and Crematories

What do I need to report?

Incineration and cremation are forms of combustion, and there are five to six pollutants to be reported. Use a **General Process Form** and calculate **CO**, **NO_x**, **PM₁₀**, **SO_x**, **VOC** and **lead** emissions based on the tons of material burned. See the “Instructions for Reporting 2003 Annual Air Pollution Emissions” for more information.

How do I fill out the General Process Form?

- Line 2 – “Process Type/Description” should include basic process information such as:
“Incinerator: copper wire,” “Incinerator: medical waste,” “Human (or animal) crematory,” etc.
- Line 4 – Use one of the following Tier Codes:
100103 Industrial Incineration
100104 Commercial/Institutional Incineration (includes hospital waste and crematories)
100199 Other Incineration (specify)
- Line 11 – Enter the number of tons burned in 2003.
- Line 12 – Enter the word “tons.”

How do I determine the emission factors?

An emission factor is a number used to calculate pounds of a pollutant emitted from tons of material burned. There is a separate emission factor for each pollutant. Emission factors for incineration processes are shown below.

SCC Name	SCC Description	SCC Code	Emission Factors (lbs/ton burned)					
			CO	NO _x	PM ₁₀	SO _x	VOC	Lead
Municipal Solid Waste Disposal	Incineration: Sludge Multiple Hearth	50100515 ¹	31	5	8.2	20	1.7	0.1
Commercial/Institutional Solid Waste Disposal	Incineration: General Multiple Chamber Incinerator	50200101 ¹	10	3	4.7	2.5	3	
Commercial/Institutional Solid Waste Disposal	Incineration: Special Purpose Pathological & Cremation	50200505 ²	0.6	11	0.8	1.4	0.2	0.073
Industrial Solid Waste Disposal	Incineration: General Multiple Chamber Incinerator	50300101 ¹	10	3	4.7	2.5	3	
Electrical Equipment	Electrical Windings Reclamation Single Chamber Incinerator/Oven	31307001 ³	10	3	4.7	2.5	3	
Electrical Equipment	Electrical Windings Reclamation Multiple Chamber Incinerator/Oven	31307002 ³	10	3	4.7	2.5	3	
Transportation Equipment	Brake Shoe Debonding Single Chamber Incinerator	31401001 ³	10	3	4.7	2.5	3	
Transportation Equipment	Brake Shoe Debonding Multiple Chamber Incinerator	31401002 ³	10	3	4.7	2.5	3	

References:

¹ FIRE Version 6.23 (Factor Information Retrieval Data System, 10/00), a database containing EPA’s recommended emission estimation factors for criteria and hazardous air pollutants, available at <http://www.epa.gov/ttnchie1/software/fire/index.html>.

² 11/97 test approved by Maricopa County Environmental Services Dept., Air Quality Division.

³ Only the SO_x emission factor was given in FIRE Version 6.23 (see ref. 1). The other emission factors were taken from commercial/institutional and industrial incinerators (SCC codes 50200101 and 50300101).

How do I calculate emissions?

On the General Process Form, multiply column 11 (tons burned) × each emission factor in column 15. Report the result in column 24, Estimated Actual Emissions, for each pollutant.